

**RAPID RESPONSE AND ERADICATION PROGRAM FOR
THE INVASIVE GREEN ALGA, *CAULERPA TAXIFOLIA*
AT AGUA HEDIONDA LAGOON, CARLSBAD, CALIFORNIA**

Prepared for:

Southern California *Caulerpa* Action Team

- Regional Water Quality Control Board – San Diego Region (RWQCB-SD)
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- U.S. Department of Agriculture (USDA)
- California Department of Fish and Game (CDFG)
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- San Francisco Estuary Institute (SFEI)
- Aquatic Nuisance Species Task Force (ANSTF)

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INTRODUCTION

Caulerpa taxifolia (Mediterranean form), an extremely invasive green alga that is presently destroying the ecosystems of the northern Mediterranean Sea was banned from importation into the United States under the federal Noxious Weed Act. While the devastation this species could bring to the United States' shorelines has been previously noted both in the scientific journals and popular press, it has previously not previously been identified in the waters of the Western Hemisphere. However, on June 12, 2000 an apparently localized infestation of *C. taxifolia* was identified in Agua Hedionda Lagoon in Carlsbad, California in San Diego County (Figure 1).

With the identification of the Agua Hedionda Lagoon infestation, a number of actions have been put in motion to eradicate this local infestation and prepare for potentially more expansive occurrences that may already exist in other coastal waters. Included among the first elements to controlling the infestation, an action committee has been established from those entities with relevant authorities, expertise, resources, and/or vested rights and interests in the lagoon and its resources. The Southern California *Caulerpa* Action Team (SCCAT) is the group assembled to address the present infestation issues. It is a public/private partnership established with the sole purpose of completing activities related to the eradication of *Caulerpa* in an efficient and well-devised manner.

On August 3, 1999 the Aquatic Nuisance Species Task Force received a Prevention Program for the Mediterranean Strain of *Caulerpa taxifolia* prepared by Sandra Keppner and Russell Caplen, ANSTF members. This prevention program includes applicable guidance for the preparation of an eradication program. This guidance, along with an outline of an action plan prepared by Nate Dechoretz, CDFA, SCCAT technical program supervisor, form the basis for the plan that has been prepared and presented herein.

This document serves as the guidance document for the implementation of a rapid response and eradication program for the known Agua Hedionda Lagoon infestation. This plan further provides direction for immediate actions in the form of surveillance in other waters and limited public outreach. It does not address the needs to develop a long-term comprehensive control plan for *Caulerpa taxifolia* that will now be required given the knowledge that this species is now present in the southern California region.